

Fig. 1A

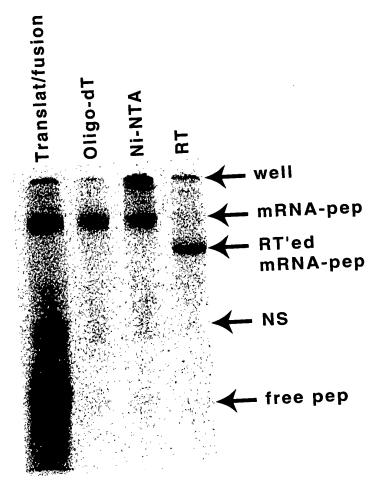
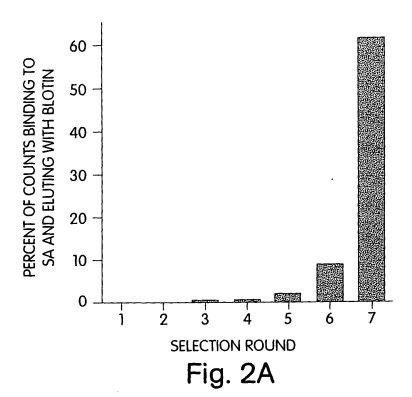
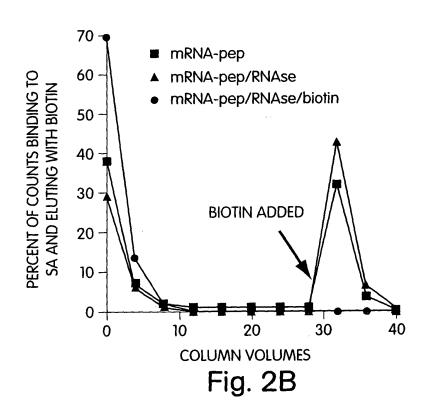


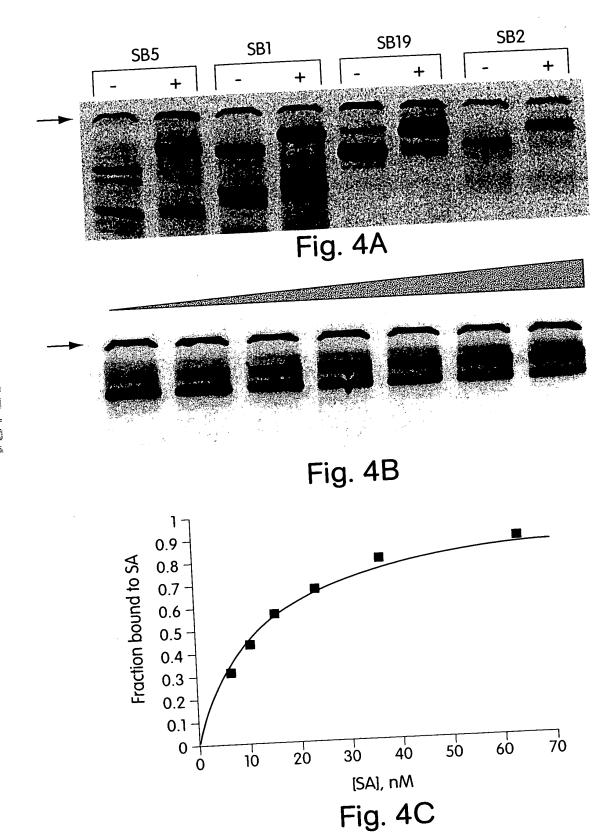
Fig. 1B





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name	# SEQ ID	\approx
SB1	3 MDEKTHCTISMNGAVPLVPHHHPQGDPLRLLHRPQPALLVRHPQGDLVALVEHHEGVDRGLVALPELHAEELGEPVGDLVQGPVEQVQGVVDALVMRLPPS	₩
SB2	2 MDEKTHCFHPGDHLVRLVEELQALAEGLQRQGGRQPHRLPRRRPHHLQLLLDEA HPQ AGPLRERAHQVDGRLLLQH HPQ GDRLLQQPQDHPLE <u>LVWRLPPS</u>	7
SB3	4 <u>MTRRPT</u> ASSSSCVRHLLLRQGEHGHQALEDRDKARHVRLVEGDVEVLGGLDRLARARHEAL HPQ AGLVHLPLHGGDLGGHLRLVLEA HPQ GDRL <u>GLAVHHH</u>	\sim
SB4	1 MDEKTHWGISTWRGEPLIHHPQAGRLPLDRRRARHRRILGAEPGGVDHGLRLELLDDHRPLVPDHHPQRGPLQRGDLPQVVPLVRLRHAHVLGLGLAAATIT	4
SB5	3 MDEKTHWVNVYHPQGDLLVRGHGHDVEALHDQGLHQLDLLVGPPPEVVRALRGEVLGGLRRLVPLDHPQGEALDQARQRPQHLLELHHRALPPALVWRLPPS	5
SB6	1 MDEKTHWINNFEELLARLDGIREGEDHPLVLRH HPQ GDGILDQPLGRHRALDGEVREGDRPLDQGGEEDLGALVDDGEVLDGIVHVGVHVHDP <u>LVCGCHHH</u>	9
SB7	1 MDEKTHWFGTLINSFPTHWMSAVGNGKIDCSFNMNLSLNHWLSSGHPDGALDDQLHPQGDALVGRDDGVVQALRLEGQHQHRRLAQRRADRHRQLVWRLPPS	7
SB8	1 MDEKTHCTIELNFSFTHWKLHH HPQ GDALLDDGVRPHHPLADEGGGLDQGLGHRRGVVAERLARRDPEVLEGLVERHRGLVPRLRHGGERHAEP <u>LVWRLPPS</u>	∞
SB9	1 MDEKTHCNTGLYDGAADCFNELNKDVAPLVEGRHDLVEGLLLERHPQGDPLVAHRQLVHHPLLGRGERHRRALVPQQEHQPHRLQPVVDLGRRR <u>LVWRLPPS</u>	σ
SB10	1 MDEKTHWHERAQELVGGLLLHDHPQRLLLEPRGPRPLRGLVHERGHQPQPLAGRVEEADGGLLRDGGGELEPLVREGEDHLEPLDDELDAGPRGLVWRLPHHH	10
SB11	1 MDEKTHWHERVHHLADGLEQHPQGQRRPLVERHRQVPRGLVRELQHEGLPLEHPAGVHVIRLHQGDDRDVDGLVDGHGRDVRGLEREVGDGPHRLVWRLPPS	H
SB12	4 <u>MOKOPL</u> LEELEELRERLVH HPQ GGLLPLRGQVGHDAERLGAEVDDLRGGLLDEPQRAVAGLHHVPHRVGQRLVHEVRELDEGLLDQRDDLRQR <u>LVWRLPPS</u>	12
SB13	2 MEREDPLDEQLRELREALVDHPQGGAQALHRHDGGEHVPLRRVQHRLQPGLQHHLEPQPLGLLGELQARLQPLAGEHEGDGAGLQRVPGHQGRR <u>LVWRLPPS</u>	13
SB14	1 MDEKTHRTLSVSLSFNDWLGQTKACWRLVEGLHGHPQGLVREHEVDVLPLAEEVQQVVGGLADGVEQPGGGLLHRAQRVDHPLPDHAGQVLGRLVWRLPPS	14
SB15	1 MDEKTHWLEDLKGVLKDCLKDLMDFTKDCRSPRVQPQPLLHHDRGEPVPLLREAGRDLGGLGPRAPRQARPLHHGRHDLHEPLVLQDHPQGGPLVCGCHHH	15
SB16	1 MDEKTHWVLQLHPQGDRLGPRHGGDDVRLVGQGEGVLEGLDGRPRRRRHRLPREDEHRVRALVDQVRDLAERLVEEVDGGVEALRHLGLPQDEPRSGGCHHH	16
SB17	2 MDEKTHWVGDLQEPLGPLHGGVGEVPGGLVLRHHPQRDRLVDGVGPHGRALARRPHRVVEGLHHLLQRGGERLPPDGPRQLGLLGGELDRADPALVWRLPPS	17
SB18	1 MOEKTHCAVNVNVGLTHWCHRVAHLQPLDPHPQGDHLRLEPLGHALVDPLVQGVEEVVRPLQLDVGVQRVALVEQVAEVGEGLDHEAGQAHGA <u>LVWRLPPS</u>	78
SB19	1 MDEKTIGWRGGHVVEGLAGELEQLRARLEH HPQ GQREPLVQEVEDVDEGLVQDLHGVVAGLLDPVEKLLTDWFKKFKNVSKDCKMTFYLEMYD <u>WSGGCHHH</u>	13
SB20 1	1 MNEKTHCKLNFKVNIADWLAEFHGGGQGLLGRRDGVVQRLVDGVQERVERLDRDPGLGDLRLELHHRDHRLRLGGEHLLRDHPLEPDDHLVVGGLVWRLPPS	20



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11 MDEKTTGWF	11 MDEKTTGWRGGHVVEGLAGELEQLRARLEH HPO GQREPLVQEVEDVDEGLVQDLHGVVAGLLDPVEKLLTDWFKKFKNVS	MMSGGCKLG 87	22
22 MDEKTTGWF	22 MDEKTTGWRGGHVVEGLAGELEQLRARLEH HPO GQREPLVQEVEDVDEGLVQDLHGVVAGLLDPVE	MMSGGCKIG 88	23
23 MDEKTTGWF	3 MDEKTTGWRGGHVVEGLAGELEQLRARLEH HPO GQREPLVQEVEDVDEGLVQ	MMSGGCKIG 89	24
24 MDEKTTGWF	24 MDEXITICWRGGHVVEGLAGELEQLRARLEHHPQGQREP	MMSGGCKIG 88	25
11 MDEKTTGWE	11 MDEKTIGWRGGHVVEGLAGELEQLRARLEH HGA GQREP	MMSGGCKIG 0.065	. 52
V1 MD	GHVVEGLAGELEQLRARLEH HPQ GQREP	MMSGGCKIG 69	27
V2 MD	EGLAGELEQLRARLEHHPPGGQREPLVQEVEDVDEGLVQDLHGVVAGLLDPVEKLLTDWFKKFKNVSKDCKMTFYLEMYDWSGGCKLG 30	TLEMYDWSGGCKLG 30	28
N3 M	ELEQLRARLEH HPQ GQREP	MMSGGCKLG 0.058	29

Fig. 5

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(SEQ ID No.: 37)

SGGTGGTGAATGTGAAACCAGTAACGTTATACGATGTCGCAGAGTATGCCGGGTGTCTCTTATCAGACCGTTTCCCGGGTG GTICTITATCCAGCGCCGGGATCTCCTTCCCAGGTTTTTGGCGGGTTCGGCAGCAGCAGATCTTTGTTATAAATCAGCGATAAC CATTCCTTGCGGGGGGGGGGCTCAACGGCCTCAACTACTAGGGCTGCTTCCTAATGCAGGAGTCGCATAAGGGAGAG GTCGAGATCCCGGACACCATCGAATGGCGCAAAACCTTTCGCGGTATGGCATGATAGCGCCCGGAAGAGAGTCAATTCA CGGGTGGCACAACAACTGGCGGGCAAACAGTCGTTGCTGATTGGCGTTGCCACCTCCAGTCTGGCCCTGCACGCGCCGT TCAGCGGTGGCAGCCAGCCAACTCAGCTTCCTTTCGGGCTTTTGTTAGCAGCCGGATCTCAGTGGTGGTGGTGGTGGTGCTC <u> GAGTGCGGCCGCAAGCTTTTTAGTCGTCATGTCCATGATAGGTGTCGTCCCCGGATATCAATGCTATTGTTAAAGCAGGTCT</u> TACACATGTTATAGATCCTCAAATGCTTGTTCTTCACCTTCCAGTTCCGGGGGGCCACCTTGCATTTCACACAAGGGTCC <u> ATGCTACCTCGGGGTACCAAGAATTCGTGATGATGGTGATGGTGACCGGATCCTGGTTCACGTTGACCTTGTGGGGTGATG</u> 3GTCCATCCCTGAGCCGCTACCTCCTGAGCTCGAATTAGTCTGCGCGTTTTTCAGGGCTTCATCGACAGTCTGACGACCG CTGGCGCCGTTGATCACCGCAGTACGCACGCCATACCAGAAAGCGGACATCTGCGGGATGTTCGGCATGATTTCACCTTT CTGGGCGTTTTICCATTGTGGCGGCAATACGTGGATCTTTCGCCAACTCTTCCTCGTAAGACTTCAGCGCTACGGCACCCA CGTTACACCATAATTCACTTTGCTGGTGTCGATGTTGGACCATGCCCACGGGCCGTTGATGGTCATCGCTGTTTCGCCTT TATTAAAGGCAGCTTCTGCGATGGAGTAATCGGTGTCTGCATTCATGTTTTGTTTTTAATCAGGTCAACCAGGAAGGTC AGACCCGCTTTCGCCCCAGCGTTATCCACGCCCACGTCTTTAATGTCGTACTTGCCGTTTTCATACTTGAACGCATAACC CCGTCAGCAGCAATCAGCGGCCAGGTGAAGTACGGTTCTTGCAGGTTGAACATCAGCGCGCTCTTACCTTTCGCTTTCA SCTTCAACAGCGATCGGGTAAGCAATCAGCTTGCCGTTGTAACGTACGGCATCCCAGGTAAAACGGATACAGCTTGTCCTG SAACGCTTTGTCCGGGGTGATTTCAGCCAACAGGCCAGATTGAGCGTAGCCACAAAGCGGTCGTGTGTGCCCAAAAAATAA TGTCAGGGCCATCGCCAGTTGCCGCAACCTGTGGGAATTTCTCTCTTCCAGTTTATCCGGATGCTCAACGGTGACTTTAATT CCGGTATCTTTCTCGAATTTCTTACCGACTTCAGCGAGACCGTTATAGCCTTTATCGCCGTTAATCCAGATTACCAGTTT accticticgaticccatggtatatctccttcttaaagttaaacaaaattattagaggggaattgttatcta AATTCCCCTATAGTGAGTCGTATTAATTTCGCGGGATCGAGATCTCGATCTTCTACGCCGGACGCATCGTGGCCGGCATC ACCGGCGCCACAGGTGCGGTTGCTGGCGCCTATATCGCCGACATCACCGATGGGGAAGATCGGGCTCGCCACTTCGGGCT atccggatatagttcctcctttcagcaaaaacccctcaagacccgtttagg

Fig. 6A

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TITCGGCGAGGACCGCTITCGCTGGAGCGCGACGATGATCGGCCTGTCGCTTGCGGTATTCGGAATCTTGCACGCCTCG CTCAAGCCTTCGTCACTGGTCCCGCCACCAAACGTTTCGGCGAGAAGCAGGCCATTATCGCCGGCATGGCGGCCCACGG GATACGCGAGCGAACGTGAAGCGACTGCTGCTGCAAAACGTCTGCGACCTGAGCAACAACATGAATGGTCTTCGGTTTCC GTGTTTCGTAAAGTCTGGAAACGCGGAAGTCAGCGCCCTGCACCATTATGTTCCGGATCTGCATCGCAGGATGCTGCTGG CTACCCTGTGGAACACCTACATCTGTATTAACGAAGCGCTGGCATTGACCCTGAGTGATTTTTCTCTGGTCCCGCCGCAT CCATACCGCCAGTIGTTTACCCTCACACGTTCCAGTAACCGGGCATGTTCATCATCAGTAACCCGTATCGTGAGCATCC TCTCTCGTTTCATCGGTATCATTACCCCCCATGAACAGAAATCCCCCTTACACGGGGGCATCAGTGACCAAACAGGAAAAA **ACCGCCCTTAACATGGCCCGCTTTATCAGAAGCCAGACATTAACGCTTCTGGAGAAACTCAACGAGCTGGACGCGGATGA** ACAGGCAGACATCTGTGAATCGCTTCACGACCACGCTGATGAGCTTTACCGCAGCTGCCTCGCGCGTTTCGGTGATGACG GTGAAAACCTCTGACACATGCAGCTCCCGGAGACGGTCACAGCTTGTCTGTAAGCGGATGCCGGGAGCAGAAAGCCGT CAGGGCGCGTCAGCGGGTGTTGGCGGGTGTCGGGGCGCAGCCATGACCCAGTCACGTAGCGATAGCGGAGTGTATACTGG CTTAACTATGCGGCATCAGAGCAGATTGTACTGAGAGTGCACCATATATGCGGTGTGAAATACCGCACAGATGCGTAAAG atcagctcactcaaaggcggtaatacggttatccacagaatcaggggttaacgcaggaaaggaacatgtgagcaaaaggcc agcaaaaggccaggaaccgtaaaaaggccgcgttgctggcgttttttcataaggctccgccccctgacgagcatcacaaa AATCGACGCTCAAGTCAGAGGTGGCGAAACCCGGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGT SCGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATA TCACTCATTAGGCACCGGGATCTCGACCGATGCCCTTGAGAGCCTTCAACCCAGTCAGCTCCTTCCGGTGGGCGCGGGGGC ATGACTATCGTCGCCGCACTTATGACTGTCTTTTATCATGCAACTCGTAGGACAGGTGCCGGCAGCGCTCTGGGTCAT GTCGAAGCCTGTAAAGCGGCGGTGCACAATCTTCTCGCGCAACGCGTCAGTGGGCTGATCATTAACTATCCGCTGGATGA CCAGGATGCCATTGCTGTGGAAGCTGCCTGCACTAATGTTCCGGCGTTATTTCTTGATGTCTCTGACCAGACACCCATCA acagtattatttctcccatgaagacggtacgcgactgggcgtggagcatctggtcaccattgggtcgcattgggtcaccagcaaatcgcg TCAGCCGATAGCGGAACGGGAAGGCGACTGGAGTGCCATGTCCGGTTTTCAACAAACCATGCAAATGCTGAATGAGGGCA TCGTTCCCACTGCGATGCTGGTTGCCAACGATCAGATGGCGCTGGGCGCAATGCGCCCATTACCGAGTCCGGGCTGCGC GTTGGTGCGGATATCTCGGTAGTGGGATACGACGATACCGAAGACAGCTCATGTTATATCCCGCCGTTAACCACCATCAA ACAGGATTTTCGCCTGCTGGGGCAAACCAGCGTGGACCGCTTGCTGCAACTCTCTCAGGGCCAGGCGGTGAAGGGCCAATC AGCTGTTGCCCGTCTCACTGGTGAAAAAAAACCACCCTGGCGCCCAATACGCAAACCGCCTCTCCCCGCGCGTTGGCC GATTCATTAATGCAGCTGGCACGACAGGTTTCCCGACTGGAAAGCGGGCAGTGAGCGCAACGCAATTAATGTAAGTTAGC CGCAAATTGTCGCGGCGATTAAATCTCGCGCCGATCAACTGGGTGCCAGCGTGGTGGTGTCGATGGTAGAACGAAGCGGC

Fig. 6A (continued)

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GAGGTGCCGTAAAGCACTAAATCGGAACCCTAAAGGGAGCCCCCGATTTAGAGCTTGACGGGGAAAGCCGGCGAACGTGG GTCAGACTAAACTGGCTGACGGAATTTATGCCTCTTCCGACCATCAAGCATTTTATCCGTACTCCTGATGATGCATGGTT ACTCACCACTGCGATCCCCGGGAAAACAGCATTCCAGGTATTAGAAGAATATCCTGATTCAGGTGAAAATATTGTTGATG CGCTGGCAGTGTTCCTGCGCCGGTTGCATTCGATTCCTGTTTGTAATTGTCCTTTTTAACAGCGATCGCGTATTTCGTCTC <u> ACAAGTCTGGAAAGAAATGCATAAACTTTTGCCATTCTCACCGGATTCAGTCGTCACTCATGGTGATTTCTCACTTGATA</u> TGTATTTAGAAAAATAAACAAATAGGGGTTCCGCGCACATTTCCCCGAAAAGTGCCACCTGAAATTGTAAACTAATAT TTTGTTAAAATTCGCGTTAAATTTTTTGTTAAATCAGCTCATTTTTTAACCAATAGGCCGAAATCGGCAAAATCCCTTATA AATCAAAAGAATAGACCGAGATAGGGTTGAGTGTTGTTCCAGTTTGGAACAAGAGTCCACTATTAAAGAACGTGGACTCC aacgtcaaagggcgaaaaaccgtctatcagggcgatggcccactacgtgaaccatcaccctaatcaagtttttttggggtc CAGAAAGGAAGGGAAGAAAGCGAAAAGGAGCGGGGCGCTAGGGCGCTGGCAAGTGTAGCGGTCACGCTGCGCGTAACCACC TTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAAACTCACGTTAAGGGATTTTGGTCATGAACAAAACTG TTCCAACATGGATGCTGATTTATATGGGTATAAATGGGCTCGCGATAATGTCGGGCAATCAGGTGCGACAATCTATCGAT IGTATGGGAAGCCCGATGCGCCAGAGTTGTTTCTGAAACATGGCAAAGGTAGCGTTGCCAATGATGATTACAGATGAGATG accttatttttgacgagggaaattaataggttgtattgatggacgagtggacgagtcggaatcgcagaccgataccaggatctt GCCATCCTATGGAACTGCCTCGGTGAGTTTTCTCCTTCATTACAGAAACGGCTTTTTCAAAAATATGGTATTGATAATCC GACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCAC TGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGTGGCTAACTACGGCTACACA GAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAA TCTGCTTACATAAACAGTAATACAAGGGGTGTTATGAGCCATATTCAACGGGAAACGTCTTGCTCTAGGCCGCGATTAAA GCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCCGTTCAGCC ACACCCGCCGCGTTAATGCGCCGCTACAGGGCGCGTCCCATTCGCCA

Fig. 6A (continued)

(SEQ ID No.:38)

TPDKAFQDKLYPFTWDAVRYNGKLIAYPIAVEALSLIYNKDLLPNPPKTWEEIPALDKELKAKGKSALMFNLQEPYFTWP VNYGVTVLPTFKGQPSKPFVGVLSAGINAASPNKELAKEFLENYLLTDEGLEAVNKDKPLGAVALKSYEEELAKDPRIAA LIAADGGYAFKYENGKYDIKDVGVDNAGAKAGLTFLVDLIKNKHMNADTDYSIAEAAFNKGETAMTINGPWAWSNIDTSK TMENAQKGEIMPNIPQMSAFWYAVRTAVINAASGRQTVDEALKDAQTNSSSGGSGSGMDEKTTGWRGGHVVEGLAGELEQ MGIEEGKLVIWINGDKGYNGLAEVGKKFEKDTGIKVTVEHPDKLEEKFPQVAATGDGPDIIFWAHDRFGGYAQSGLLAEI LRARLEHHPQGQREPGSGHHHHHHEFLVPRGSMDPCVKCKVAPRNWKVKNKHLRIYNMCKTCFNNSIDIGDDTYHGHDD

Fig. 6B

(SEQ ID No.:39)

MDPCVKCKVAPRNWKVKNKHLRIYNMCKTCFNNSIDIGDDTYHGHDD

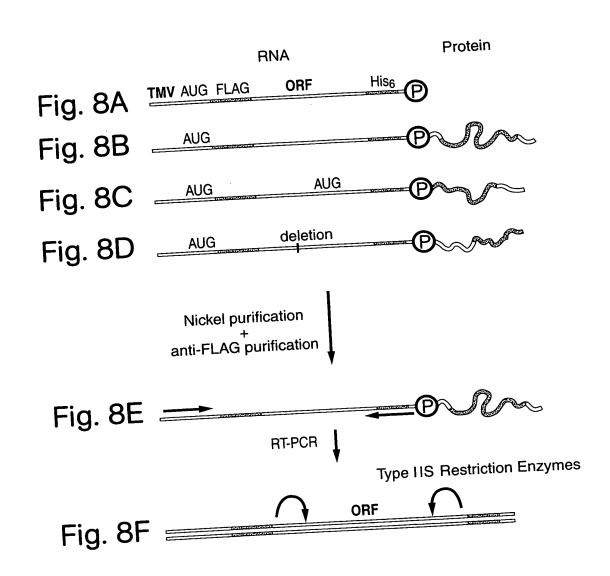
Fig. 6C

MDEKTTGWRGGH<u>VV</u>EG<u>LA</u>GE<u>L</u>EQLRARLEHHPQGQREP

Fig. 7A



Fig. 7B



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(SEQ ID No.:40)

GACAGTCTGACGACCGCTGGCGGCGTTGATCACCGCAGTACGCACGGCATACCAGAAAGCGGACATCTGCGGGATGTTCG TGAAGGTCGGCAGTACCGTTACACCATAATTCACTTTGCTGGTGTCGATGTTGGACCATGCCCACGGGCCGTTGATGGTC GTCAACCAGGAAGGTCAGACCCGCTTTCGCGCCAGCGTTATCCACGCCCACGTCTTTAATGTCGTACTTGCCGTTTTTCAT actigaacgcataacccccgtcagcaatcagcggccaggtgaagttgagtgaagtacggttcttgcaggttgaacatcagcgcgctc TTACCTTTCGCTTTCAGTTCTTTATCCAGCGCCGGGATCTCTTCCCAGGTTTTTGGCGGGTTCGGCAGCAGATCTTTGTT ataaatcagcgataacgcttcaacagcgatcgggtaagcaatcagcttgccgttgtaacgtacggcatcccaggtaaacg GATACAGCTTGTCCTGGAACGCTTTGTCCGGGGTGATTTCAGCCCAACAGGCCAGATTGAGCGTAGCCACCAAAGCGGTCG TGTGCCCAGAAGATAATGTCAGGGCCATCGCCAGTTGCCGCAACCTGTGGGAATTTCTCTTCCAGTTTATCCGGATGCTC <u>AACGGTGACTTTAATTCCGGTATCTTCTCGAATTTCTTACCGACTTCAGCGAGACCGTTATAGCCTTTATCGCCGTTAA</u> TCCAGATTACCAGTTTACCTTCTTCGATTcccatqqTATATCTCCTTCTTAAAGTTAAACAAAATTATTCTAGAGGGGA **ATTGTTATCCGCTCACAATTCCCCTATAGTGAGTÖĞTATTAATTTCGCGGGATCGAGATCTCGATCCTCTACGCGGACG** CATCGTGGCCGGCATCACCGGCGCCACAGGTGCGGTTGCTGGCGCCTATATCGCCGACATCACCGATGGGGGAAGATCGGG CTCGCCACTTCGGGCTCATGAGCGCTTGTTTCGGCGTGGGTATGGTGGCAGGCCCCGTGGCCGGGGGGACTGTTGGGCGC ATCTCCTTGCATGCACCATTCCTTGCGGCGGCGGTGCTCAACGGCCTCAACCTACTACTGGGCTGCTTCCTAATGCAGGA GTCGCATAAGGGAGAGCGTCGAGATCCCGGACACCATCGAATGGCGCAAAACCTTTCGCGGTATGGCATGATAGCGCCCG GAAGAGAGTCAATTCAGGGTGGTGAATGTGAAACCAGTAACGTTATACGATGTCGCAGAGTATGCCGGTGTCTCTTATCA GACCGTTTCCCGCGTGGTGAACCAGGCCAGCTTTCTGCGAAAACGCGGGAAAAGTGGAAAGCGGCGATGGCGGAGTGG TGAATTACATTCCCAACCGCGTGGCACAACAACTGGCGGGCAAACAGTCGTTGCTGATTGGCGTTGCCACCTCCAGTCTG GCCCTGCACGCGCCGTCGCAAATTGTCGCGGCGATTAAATCTCGCGCCGATCAACTGGGTGCCAGCGTGGTGGTGGTGTCCAT 3GTAGAACGAAGCGGCGTCGAAGCCTGTAAAGCGGCGGTGCACAATCTTCTCGCGCAACGCGTCAGTGGGCTGATCATTA TCAGCGGTGGCAGCAGCCAACTCAGCTTCCTTTCGGGCTTTGTTAGCAGCCGGATCTCAGTGGTGGTGGTGGTGGTGGTG <u> GAGTGCGCCCCAAGCTTCAGCTGCGAAGCTTATTAGAATTCGTGATGATGGTGATGGTGATGGTGACCGGATCCTGGTTCACGTT</u> CAACCAGTGGTCTTCTCGTCCATCCCTGAGCCGCTACCTCCTGAGCTCGAATTAGTCTGCGCGCTCTTTCAGGGCTTCATC GCATGATTTCACCTTTCTGGGCGTTTTCCATtGTGGCGGCAATACGTGGATCTTTCGCCAACTCTTCCTCGTAAGACTTC atccggatatagttcctcctttcagcaaaaacccctcaagcccgtttagaggccccaagggcttatgc

Fig. 9A

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GACCAAACAGGAAAAAACCGCCCTTAACATGGCCCGCTTTATCAGAAGCCAGACATTAACGCTTCTGGAGAAACTCAACG AGCTGGACGCGGATGAACAGGCAGACATCTGTGAATCGCTTCACGACCACGCTGATGAGCTTTACCGCAGCTGCCTCGCG CGTTTCGGTGATGACGGTGAAAACCTCTGACACATGCAGCTCCCGGAGACGGTCACAGCTTGTCTGTAAGCGGATGCCGG CTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGC GTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCCAGTTCGGTGTAGGTCGTTCGCTCCAAGCTGGGCTGTGTGCACGA CAGCGCTCTGGGGTCATTTTCGGCGAGGACCGCTTTCGCTGGAGCGCGACGATGATCGGCCTGTCGCTTTGCGGTATTCGGA CGTATCGTGAGCATCCTCTCTCGTTTCATCGGTATCATTACCCCCATGAACAGAAATCCCCCTTACACGGAGGCATCAGT GCGGAGTGTATACTGGCTTAACTATGCGGCATCAGAGCAGATTGTACTGAGAGTGCACCATATATGCGGTGTGAAATACC GCACAGATGCGTAAGGAGAAAATACCGCATCAGGCGCTCTTCCGCTTCCTCGCTCACTGACTCGCTGCGCTCGGTCGTTC GGCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGGTTAACGCAGGAAAGAAC ATGTGAGCAAAAAGGCCAGCAAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCC TGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCC **ACCCCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGC** ATTAATGTAAGTTAGCTCACTCATTAGGCACCGGGATCTCGACCGATGCCCTTGAGAGCCTTCAACCCAGTCAGCTCCTT CCGGTGGGCGCGGGCATGACTATCGTCGCCGCACTTATGACTGTCTTTTATCATGCAACTCGTAGGACAGGTGCCGG ATCTTGCACGCCCTCGCTCAAGCCTTCGTCACTGGTCCCGCCACCAAACGTTTCGGCGAGAAGCAGGCCATTATCGCCGG AGCAGAATGAATCACCGATACGCGAGCGAACGTGAAGCGACTGCTGCTGCAAAAACGTCTGCGACCTGAGCAACAACATGA ATGGTCTTCGGTTTCCGTGTTTCGTAAAGTCTGGAAACGCGGAAGTCAGCGCCCTGCACCATTATGTTCCGGATCTGCAT CGCAGGATGCTGCTGCTACCCTGTGGAACACCTACATCTGTATTAACGAAGCGCTGGCATTGACCTGAGTGATTTTTC TCTGGTCCCGCCGCATCCATACCGCCAGTTGTTTACCCTCACAACGTTCCAGTAACCGGGCATGTTCATCATCATAACC GACCAGACACCCATCAACAGTATTATTTCTCCCATGAAGACGGTACGCGACTGGGCGTGGAGCATCTGGTCGCATTGGG CGAGTCCGGGCTGCGCGTTGGTGCGGATATCTCGGTAGTGGGATACGACGATACCGAAGACAGCTCATGTTATATCCCGC GTTAACCACCATCAAACAGGATTTTCGCCTGCTGGGGCAAACCAGCGTGGACCGCTTGCTGCAACTCTCTCAGGGCCAG TCCCCGCGCGTTGGCCGATTCATTAATGCAGCTGGCACGACAGGTTTCCCGACTGGAAAGCGGGCAGTGAGCGCAAACGC CATGGCGGCCCCACGGGTGCGCATGATCGTGCTCCTGTCGTTGAGGACCCCGGCTAGGCTGGCGGGGGTTGCCTTACTGGTT TCACTCGCAATCAAATTCAGCCGATAGCGGAACGGGAAGGCGACTGGAGTGCCATGTCCGGTTTTCAACAAACCATGCAA

Fig. 9A (continued)

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GATTTCTCACTTGATAACCTTATTTTTGACGAGGGGAAATTAATAGGTTGTATTGATGTTGGACGAGTCGGAATCGCAGA CCGATACCAGGATCTTGCCATCCTATGGAACTGCCTCGGTGAGTTTTCTCCTTCATTACAGAAACGGCTTTTTTCAAAAT CGGATACATATTTGAATGTATTTAGAAAAATAAAATAGGGGTTCCGCGCACATTTCCCCGAAAAGTGCCACCTGAAA TTGTAAACGTTAATATTTTGTTAAAATTTCGCGTTAAATTTTTTGTTAAATCAGCTCATTTTTTAACCAATAGGCCGAAATC GGCAAAATCCCTTATAAATCAAAAGAATAGACCGAGATAGGGTTGAGTGTTGTTCCAGTTTGGAACAAGAGTCCACTATT CAAGTTTTTTGGGGTCGAGGTGCCGTAAAGCACTAAATCGGAACCCTAAAGGGGAGCCCCCGATTTAGAGCTTGACGGGGA aagccggcgaacgtggccagaaaggaagggaagaaaaagcgaaagggaggcgcgcgcgctagggggggcgctggcaagtgtagcggtcac GCGACAATCTATCGATTGTATGGGAAGCCCGATGCGCCAGAGTTGTTTCTGAAACATGGCAAAGGTAGCGTTGCCAATGA CTGATGATGCATGGTTACTCACCACTGCGATCCCCGGGAAAACAGCATTCCAGGTATTAGAAGAATATCCTGATTCAGGT GAAAATATTGTTGATGCGCTGGCAGTGTTCCTGCGCCGGTTGCATTCGATTCCTGTTTGTAATTGTCCTTTTTAACAGCGA ATGGCTGGCCTGTTGAACAAGTCTGGAAAGAAATGCATAAACTTTTGCCATTCTCACCGGATTCAGTCGTCACTCATGGT aactacggctacactagaaggacagtatttggtatctgcgctctgctgaagccagttaccttcggaaaaagagttggtag CTAGGCCGCGATTAAATTCCAACATGGATGCTGATTTATATGGGTATAAATGGGCTCGCGATAATGTCGGGCAATCAGGT TGTTACAGATGAGATGGTCAGACTAAACTGGCTGACGGAATTTATGCCTCTTCCGACCATCAAGCATTTTATCCGTACT GATCTCAAGAAGATCCTTTGATCTTTTTTACGGGGTCTGACGCTCAGTGGAACGAAAACTCACGTTAAGGGATTTTGGTC CACTGGCAGCCACTGGTAACAGGATTAGCAGGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCG a tgaacaataaaactgtttacataaacagtaatacaagggtgttatgaggcgtgttataggccatattcaacgggaaacgtcttgct GCTGCGCGTAACCACCACACCCGCCGCGCTTAATGCGCCGCTACAGGGCGCGCTCCCATTCGCCA

Fig. 9A (continued)

(SEQ ID No.:41)

VNYGVTVLPTFKGQPSKPFVGVLSAGINAASPNKELAKEFLENYLLTDEGLEAVNKDKPLGAVALKSYEEELAKDPRIAA TMENAQKGEIMPNIPQMSAFWYAVRTAVINAASGRQTVDEALKDAQTNSSSGGSGSGG<u>MDEKTTGWRGGHVVEGLAGELEQ</u> TPDKAFQDKLYPFTWDAVRYNGKLIAYPIAVEALSLIYNKDLLPNPPKTWEEIPALDKELKAKGKSALMFNLQEPYFTWP LIAADGGYAFKYENGKYDIKDVGVDNAGAKAGLTFLVDLIKNKHMNADTDYSIAEAAFNKGETAMTINGPWAWSNIDTSK MGIEEGKLVIWINGDKGYNGLAEVGKKFEKDTGIKVTVEHPDKLEEKFPQVAATGDGPDIIFWAHDRFGGYAQSGLLAEI LRARLEHHPQGQREPGSGHHHHHHEF

Fig. 9B

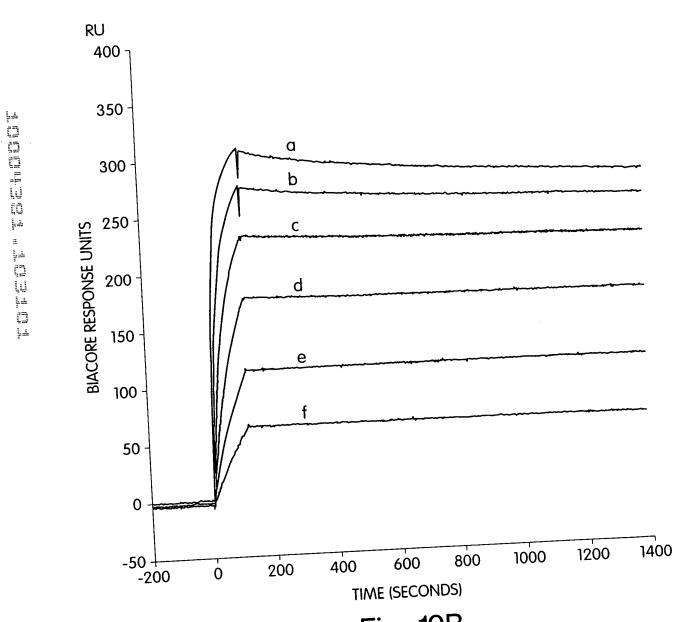


Fig. 10B

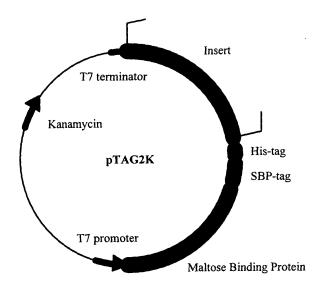
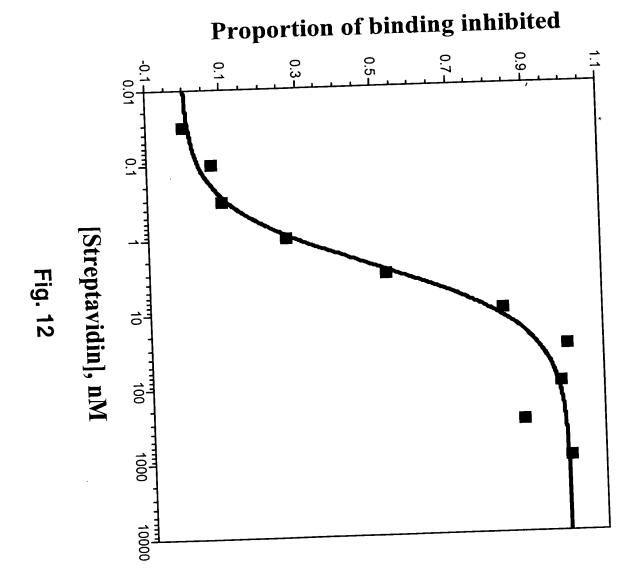


Fig. 11



Uninduced

Induced

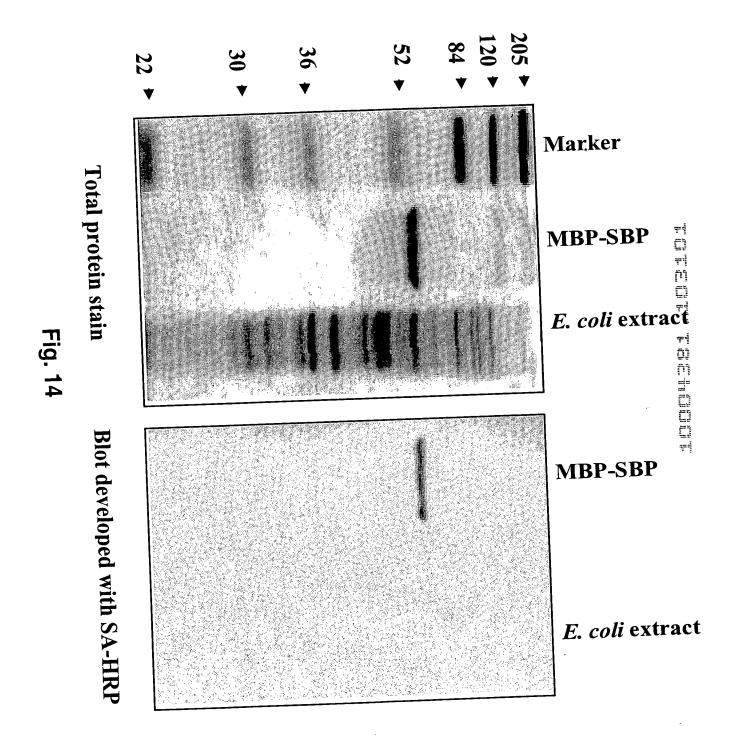
Soluble Fraction

Biotin Elution

Imidazole Elution

Maltose Elution

Fig. 13



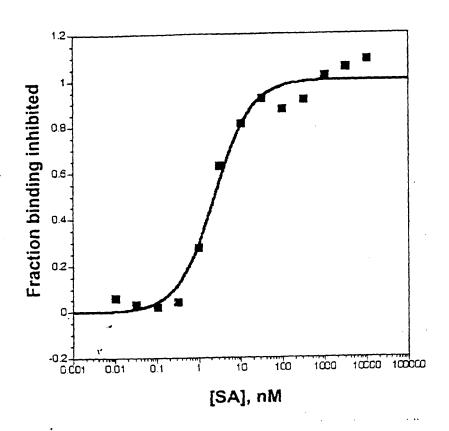


Fig. 15